

Conducting a Community Bicycle Repair Clinic

The average child's bicycle, unless it is brand new, is usually in terrible condition. Kids leave their bikes in the rain, throw them down in the driveway, ride them over rough terrain, down curbs, and over potholes. When the brakes stop working or fall off, they use their feet to stop; if the gears don't work, they ride it as a single-speed; if the handlebars are loose, they find a way to compensate for the lack of steering control; if the spokes are broken, so what?

In general, kids pay little or no attention to the maintenance of their bicycle. This is unfortunate as 12% of all reported bicycle accidents are the result of mechanical failure and thus could be prevented through proper care of the vehicle. For this reason, a bicycle clinic is an important part of a total bicycle safety program.

In order for a bicycle clinic to be really successful, each child must understand what is being done to his or her bike, why it is being done, and should be allowed to observe how it is being done. To accommodate this, at least one experienced mechanic will be needed per 10-12 bicycles handled during the clinic. Mechanical assistance can be solicited from local bike shops or from members of local bicycle clubs. A bike shop owner might be more willing to participate if replacement parts to be used for the clinic are purchased from his or her bike shop.

To speed the process of handling the children and their bikes, a bicycle inspection to determine any problems should precede the clinic. A tag listing points to be checked should be attached to each bicycle. Then the child can simply wheel the bicycle to a repair station and the mechanic can begin work immediately.

The clinic area should be set up in an organized manner. Children should be kept away from the repair area unless their bicycle is being worked on. This can be accomplished by giving each child a number as they arrive, then having them wait in another area until their number is called. Ideally, there should be something such as a film, slide show or safety exercise to occupy the waiting children's attention and to keep them from getting restless.

Don't expect to be able to repair all the bicycles. Some are beyond repair. It does no good to fix the gears, patch the tire, and replace broken spokes on a bicycle that has no brakes and is a hazard to ride. The decision on how much repair work will be done should be made in advance. Following is a list of the most common problems which might be handled during the clinic:

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|------------------------------------|-----------------------------------|
| -Flat tire | -Rusty or broken chain |
| -Broken or rusted cables | -Brakes not adjusted |
| -Worn brake pads | -Wobbly wheels |
| -Missing handlebar grips/end plugs | -Hub cones out of adjustment |
| -Broken spokes | -Loose nuts and screws |
| -Derailleurs out of adjustment | -Hanging cables |
| -Loose handlebar | -Missing coaster brake clips |
| -Loose seat | -Unwrapped handlebars (ten-speed) |
| -Missing or damaged pedals | -Loose brake clamps |

Consult with a local bicycle repair shop to determine what parts will be needed to repair the number of bicycles you might expect to handle during the clinic. The following list is based on a group of 50 bikes and will give you an idea of what you might need and the approximate cost. Replacement parts which will be needed to perform these repairs on 50 average bicycles include:

- 15 20" tubes
- 5 24" tubes
- 12 26" tubes
- 15 27" tubes
- 5 27" presta tubes
- 5 20 x 1.75 tires
- 8 26 x 1 3/8 tires
- 2 24 x 1 3/8 tires
- 6 27 x 1 1/2 tires
- 5 27" presta tubes
- assorted nuts and bolts
- 20 brake cables with housing
- 10 gear cables with housing
- 5 pair handlebar grips
- 10 tire patches with adhesive
- 24 pair brake blocks
- 35 spokes, assorted lengths
- 3 chains/1 master link
- 4 dozen cable clips
- 2 dozen rear reflectors
- 3 4 1/2" rubber pedal sets
- 10 handlebar end plugs
- 2 dozen rolls handlebar tape, assorted colors
- 5 coaster brake clips with bolts
- 3 cans spray lubricant
- rags

These items will cost approximately \$250 - \$300 or \$6.00 per bike. Financial assistance might be solicited from local civic organizations to buy parts and hire mechanics, if necessary. A local bicycle shop might be willing to co-sponsor your event, possibly providing the parts at a discount. Local recreation centers, schools, YMCA's, YWCA's, or other community organizations may also be willing to sponsor the activity. Remember to locate the clinic at a place that is easily accessible by bike.

